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Effects of Life and Job Stress on Information Search Behaviors of Organizational Members

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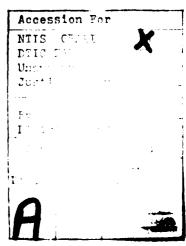
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(Daniel R. Ilgen, Principal Investigator) (Howard M. Weiss, Principal Investigator)

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Abstract

The relationship of stressful life events in and out of work to role relevant information search was examined. It was suggested that stressful life events lead a person to question the appropriateness of typical modes of role enactment resulting in increased role relevant information search. Forty four individuals employed in a wide variety of organizations completed questionnaires measuring two types of stressful events (life and work) and role related information search in two settings (on and off the job). Results showed that stressful events significantly predicted information search activities. However, work related stressful events predicted information search conducted on the job while life stress predicted off-the-job search.

Effects of Life and Job Stress on Information Search Behaviors of Organizational Members

The uncertainty which accompanies entrance into unfamiliar surroundings is a significant problem with which new employees are compelled to deal. A number of organizational researchers have noted that the cognitive and behavioral activities intended to reduce this uncertainty and bring structure to the new environment are important components of the process of organizational socialization. For example, Louis (1980) has described three significant characteristics of newcomers experiences: change, contrast and surprise. These three characteristics contribute to a need for "sense making" and stimulate behaviors and cognitive activities to reduce uncertainty and provide meaning and structure to unfamiliar organizational events and features. Similarly, Weiss (1977,1978) has argued that the initial employment period is a time of problem solving during which new employees are attempting to determine appropriate role behaviors. This time is characterized by high levels of information search activities designed to reduce uncertainty. Thus, the pressure for uncertainty reduction stimulates an important part of the role defining process.

To reduce uncertainty, new workers actively search for and are receptive to various types of role structuring and performance evaluation information. Weiss has argued that as

part of this role search process new employees pay particularly close attention to the behaviors and outcomes of coworker role models. In addition, new workers may also attempt to reduce uncertainty by seeking performance information from supervisors, peers, subordinates, etc. (Ilgen, Fisher and Taylor, 1979). The information they gather during this period determines their behavioral and attitudinal adaptation to their new roles.

Although much of the focus has been on the initial entry into an organization, organizational socialization is generally characterized as a process recurring throughout a career (Katz, 1980; Van Maanen and Schein, 1978). Yet the recognition of frequent change and adaptation should not be taken to imply that socialization is continuous. We suggest that a more reasonable description of the process is one of alternating periods of change and habituation. While the search for and receptivity to role information resulting from uncertainty leads to role development and change in the new employee, the role behaviors which develop eventually stabilize and habituate. Gradually, as uncertainty is reduced, employees enter into a period characterized by a greater degree of confidence in the appropriateness of their behaviors and attitudes and the validity of their understanding of the organization. During this period cognitive activity related to role definition is minimal. Individuals will not generally be seeking role relevant information, nor will they be particularly attentive to subtle performance evaluation and feedback provided by others.

overt criticism is likely to be rationalized away. Over time the role behavior becomes a well developed script (Abelson, 1976) and individuals no longer give the behavior the cognitive activity they gave it earlier (Langer, 1978). Furthermore, influence processes effective in changing behavior during the period of uncertainty are likely to be substantially less effective during this period of habituation. The individual has "progressed" to a less influenceable state and, as a result, behavior change and development is more difficult.

It is further suggested that this stable period of habitual role enactment continues until some substantial environmental change or stimulus reinvokes a state of uncertainty. At that point the individual begins to question the relevance and appropriateness of what has become the typical mode of role enactment and re-enters a state of heightened role relevant cognitive activity. Information search increases as individuals try to obtain feedback to evaluate the correctness of their current role behavior and look for potential alternative modes of enacting their roles. The employee is now influenceable and behavior change and development are possible again.

What events are likely to reproduce role uncertainty, reinitiate search activities and increase the likelihood of behavior change? One obvious event is a job change. Van Maanen and Schein (1978) and Katz (1980) have argued that a job change represents a change from the familiar to the unfamiliar and, as a result, the "individual re-enters or cycles into the

socialization stage where he or she must renegotiate the initial learning phase to restore the temporary loss of the familiar (Katz, p. 160).

However, a change in position is not the only event which might cause individuals to question the appropriateness of their role behavior. Of particular relevance to the process may be the occurrence of highly stressful events or crises in the person's life which serve as stimuli provoking a re-examination of typical patterns of behavior. So, for example, being turned down for a promotion or being involuntarily transferred may be events of sufficient impact to generate a degree of uncertainty substantial enough to initiate search behaviors. In addition, events which provoke a questioning of work role enactment need not be limited to crises at work. Non-work related stressful events may also serve as stimuli eliciting re-examination of typical work behaviors. For example, a divorce may cause an individual to question whether he or she is too involved in his or her work. Similarly, the birth of a child may produce a reassessment of career goals. These types of significant life events, both in and out of work, may succeed in producing a change sufficient to move the individual out of a state of habitual nonquestioning role enactment and into a state of heightened role relevant cognitive activity.

The purpose of this study was to provide a preliminary examination of the relationship between stressful life events and work relevant information search behavior. Specifically,

stressful life experiences of two types were assessed and correlated with the extent of various search behaviors. Stressful life experiences outside of work were measured using the Holmes and Rahe (1967) "Schedule of Recent Experiences". Comparable stressful events at work were assessed using the "Organizational Readjustment Rating Scale" (Naismith, 1975). These events measures were then correlated with indices of two types of job relevant search behavior -search occuring on the job such as requests for feedback from superiors and search occuring off the job such as attendance in continuing education classes.

Method

Subjects

Forty two men and two women attending management development seminars at Purdue University participated in the research. Participants were all full time employees located in a variety of organizations and held positions ranging from first line supervisor to chief executive. The mean age in the group was 37.7 years. On the average participants had been employed by their organizations for nine years and had been in their present positions for just over three years. Thirty nine percent of the participants had some college while 34% had graduated from college.

Procedure

After briefly describing the general nature of the research, seminar instructors distributed a questionnaire to all seminar participants. The questionnaire contained all the variables of interest and took approximately twenty minutes to complete. Seminar participants were asked to complete the questionnaire on their own time and mail them directly to the researchers in an addressed envelope which was attached. A cover letter stressed the anonymity and confidentiality of the data and the fact that participation was voluntary. Approximately 50% of the seminar participants returned questionnaires.

<u>Measures</u>

Stressful Events -Two types of stressful events were measured. Non-work related events were assessed using the Holmes and Rahe (1967) "Schedule of Recent Events" (SRE). The scale consists of 43 stressful life events such as "death of a spouse", "divorce", "foreclosure of a mortgage or loan", and "change in residence". Associated with each item is a weight indicating the amount of social readjustment the event would require relative to other events on the list. (For a description of the development of the weights see Holmes and Rahe, 1967.) Respondents indicated which of the listed events had occurred in the previous twelve months and a total "Life Stress" score was obtained by summing the weights for the items checked. The SRE has been used in a wide variety of stress related studies since its development, with results supporting a relationship between SRE scores and

numerous behavior and health related criteria (Johnson and Sarason, 1979).

"Organizational Readjustment Rating Scale" (ORRS) developed by Naismith (1975). The ORRS is an events scale which was patterned after the SRE but designed to measure stressful life events occurring on the job. Respondents indicated which of 31 stressful job events had occurred in the previous twelve months. Examples of such events are "cancellation of a project you were involved in and considered important" and "got a new boss". In this study, a total job related "life stress" score was computed by simply summing the number of events checked. While Naismith does provide a weighting scheme for the scale, it has not been subjected to the extensive research of the Holmes and Rahe scheme and, therefore, it was decided that a nonweighted scoring procedure would be more appropriate.

Although the two measures are designed to assess stressful events in different domains, they do have some common items. This is not unexpected since the importance of work dictates that any list of significant stressful life events include some that are job related. So, for example, the SRE contains the items "trouble with boss", "being fired", "major change in responsibilities at work" and "major change in working hours and conditions". As a result of common content (and real covariation among stressful events) the two stress events measures were found to correlate r=.40. Because of this correlation multiple

regression analyses were used to supplement zero order correlations to assess the independent effects of the two types of life stress events.

Information Search Behavior -Information search behaviors were assessed using a format similar to the stress events scales. Respondents were presented with a list of specific types of search behaviors and asked to indicate how often in the past year they had engaged in those behaviors. Two types of search behaviors were assessed. On-the-job search behavior was measured using a 12 item scale asking about search behavior tapping information sources available on their jobs. For example, respondents were asked how often in the past year they "asked a coworker to look over your work and tell you what he or she thought of it", "asked your supervisor to look over your work and tell you what he or she thought of it", "asked for a review of your work even though it was not required" and "compared something you did to a similar piece of work done by a coworker." Off-the-job search was measured with a seven item scale focusing on the use of outside sources to gather new career and role information. For example, respondents were asked how often in the past year they had "attended a continuing education course" or "checked the classified ads for job opportunities."

While search items were selected a priori to represent the two dimensions, a principal components analysis confirmed the a priori classification. In addition, a nonsignificant correlation between the scales of r=.13 attests to their independence.

Internal consistency reliabilities were .77 for the scale measuring on-the-job search activities and .74 for the measure of off-the-job search activities.

Demographic information was also requested from respondents. Specifically, participants were asked to indicate age, sex, education level, marital status and tenure in their organization and in their current positions.

Results

Correlations between the demographic variables and the stress and search variables are presented in Table 1. While the overall pattern of results does not suggest a strong association between the demographic variables and stressful events or search, some individual correlations are worth noting. First, respondents with longer tenure in the organization and in their present positions experienced fewer stressful life events in the past year than did participants with shorter tenure. Similarly, those with longer tenure in their current positions also experienced fewer stressful events at work. While this latter finding is not surprising, a possible confounding by age, which was also correlated with frequency of stressful events at work and tenure in current position (r=.39, p<.01), must be recognized.

Insert Table 1 about here

Only one significant relationship between any of the demographic variables and either type of search behavior was found. On-the-job search behavior was negatively correlated with tenure in the organization indicating, as one would expect, that the longer one has been in the organization the less likey one is to engage in role defining information search activities. However, in spite of this correlation and the correlations involving tenure and stressful events, the overall pattern of results suggests a generally weak association between the demographic variables and the stress and search measures in this sample.

The results relevant to the major issue of this paper, the relationship between stressful life events and search behavior, are presented in Table 2. It can be seen that the expected relationships are strongly supported. Stressful life events, as measured by the Holmes and Rahe "Schedule of Recent Events" was significantly correlated with both off-the-job search behaviors (r=.54 p<.01) and on-the-job search behaviors (r=.33 p<.05). Job related stressful life events, as measured by the Organizational Readjustment Rating Scale" was significantly correlated with on-the-job search behaviors (r=.42, p<.01). The ORRS was not, however, correlated with off-the-job search.

Insert Table 2 about here.

As indicated earlier, the SRE and ORRS have some degree of common content due to the SRE containing a number of work related events. As a result, the two scales correlated r=.40 in this sample. To assess the independent effects of work and nonwork related stressful life events on the two types of search behaviors semipartial correlational analyses using hierarchical multiple regression were conducted. That is, the independent effect of life stress holding job stress constant was analyzed by first entering the ORRS scale in the regression analysis and then assessing the significance of the increment in variance accounted for by adding the SRE. Similarly, the independent effect of job related stressful events holding life stress constant was examined by testing the significance of the increase in variance when the ORRS was added to an equation already containing the SRE. The results of these analyses are presented in Table 3.

Insert Table 3 about here.

The regression analyses clearly indicate that the relationships of stressful life events to search behaviors are domain specific. That is, stressful life events on the job show a significant relationship to on-the-job search behavior when life stress is held constant but do not significantly influence

search conducted off the job and focused on alternative jobs and careers. Similarly, life stress has no independent contribution to the prediction of on the job search behavior but does influence search directed off the job.

Discussion

It was suggested that stressful events in a person's life may lead that person to question the relevance and appropriateness of typical modes of role enactment. This state of role uncertainty should result in a search for role relevant information either to assure oneself that current role behaviors are still appropriate or to discover alternative courses of action which may be more appropriate or attractive. The results of our study supported the expected relationship between stressful life events and search activities. Furthermore, the effects of stressful events on search behavior were found to be domain specific. That is, work related stressful events were found to predict on-the-job search activities only, while stressful life events were found to be most predictive of searching for role relevant information off-the job.

Obviously, the interpretation and implications of these results are limited by the survey methodology. While a specific causal framework is being offered, the correlational nature of

the study allows for alternative explanations. As such, it may be instructive to consider three possible reasons for the observed correlations: stressful events produce search behavior, as suggested; search behavior produces increments in stressful life events; both variables are influenced by a third variable or set of variables.

Logically, it seems unlikely that search activities could affect the kinds of stressful events listed in the SRE or the ORRS. For example, it is hard to imagine how checking the classified ads or attending a continuing education class could cause the death of a family member or the foreclosure on a mortgage or loan. Similarly, asking for a performance review resulting in getting a new boss seems improbable. However, even though the causal direction of searching leading to stressful events can be considered extremely unlikely for most of the items, it is still possible that for some small number of items that particular causal direction is not illogical and those items are accounting for the results. Therefore, in total, although it seems unlikely that search behaviors causing an increase in stressful events accounted for the correlations, this alternative explanation cannot be ruled out entirely.

A second artifactual explanation of the results is that scores on the search and stressful events scales are influenced by a common third variable or set of variables. Of particular relevance is the possibility that method variance was responsible for the correlations. In this study, which used the same

questionnaire and same item format for all variables, the potential for this kind of confounding cannot be denied. However, the fact that the items asked respondents to list specific events which had occurred in the last year should have minimized this problem. Asking for the frequency of attending continuing education courses seems less subject to method bias than, for example, asking for the extent of agreement with an attitude statement. Since all of the items in the questionnaire were descriptive ones it seems likely that problems of common method variance were decreased.

A second point which decreases the probability of a common method variance effect is the fact that stress and search are domain specific. Since all the variables used the same format, a common method variance effect would produce an undifferentiated set of correlations, rather than the pattern of relationships found in this study. Common method variance cannot explain the observed pattern of effects.

while the problem of common method variance does not seem severe, other potential "third variables" explanations cannot be easily ruled out. For example, individuals may vary in certain individual characteristics, such as general activity levels, which may influence search activities and the probability of experiencing stressful events. While the weak relationships of the demographic variables to both search and stress indicates that demographic differences are not responsible for the results, further research is needed to rule out other explanations.

Let us now consider the third causal interpretation, stressful events producing an increase in role relevant information search activities. If, as suggested, stressful events, either in ones life or specifically on the job, lead to increased search for role relevant information, the results of this study have several interesting implications. stressful life events as measured by the Schedule of Recent Events correlated with off-the-job search rather than search occurring on the job. For the most part, the items assessing off-the-job search related to the job as a whole and possibilities for changing the job or occupation e.g. check classified ads, ask friends about possible job opportunities, take continuing education courses. As such, these items dealt with the gathering of information about the possibility of a rather major change in one's life -a change of jobs or careers. In contrast, on-the-job search activities dealt with gathering information relevant to changing behavior to improve one's fit with the current job. The finding that stressful life events (as opposed to similar work events) had their influence on off-thejob rather than on-the-job search implies that major life stresses are more likely to lead to radical reconsiderations of one's approach to work in general rather than to readjustments of behavior styles on one's current job. On the other hand, stressful events occuring on the job have an opposite effect. Stressful events at work are more likely (at least initially) to lead to a reconsideration of behavioral styles on the current job

rather than abandoning that job for another or a different career.

Finally, the results of this study suggest that stress can serve a positive function by producing a re-evaluation of habitual role enactment, stimulating information search and subsequent adaptation to a changing environment. Organizations constantly face the problem of experienced workers clinging to outmoded behavior styles in the face of changing demands. To the extent that stressful events shake the employee out of his or her complacency these events may have a beneficial effect to accompany their oft described negative outcomes. Indeed the potential dysfunctional effects of unquestioned habitual role enactment clearly suggests the importance of continued research on stressful events and other factors which produce heightened role relevant cognitive activity and the possibility of behavior change.

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Table 1

Correlations of Demographic Variables With

Stress Events and Search Measures

	Stressful Life Events	Stressful Job Events	On the Job Search	Off the Job Search
Age	21	32 ^a	24	21
Marital Status	.15	27 ^a	19	06
Education Level	.01	.10	.07	.06
Tenure in Organization	29 ^a	22	31 ^a	22
Tenure in Current Position	35 ^a	~.26ª	10	10

a p **∠.**05

1 2 1

Table 2

Intercorrelations of Stress and Search Variables

	Stressful Life Events	Stressful Job Events	On the Job Search
Stressful Job Events	.40b		
On-the-Job Search	.33ª	.42 ^b	
Off-the-Job Search	.54b	.14	.13

a p **≰.**05

b p **≤**.01

Table 3

Regression Analyses to Test Independent Contributions

of the Stressful Events Measures

Dependent Variable	Variable Entered First	Variable Entered Second	Change in R	F	Significance of Change in R ²
Off-the-Job Search	Stressful Job Events	Stressful Life Events	.10	5.05	.05
Off-the-Job Search	Stressful Life Events	Stressful Job Events	.03	1.70	n.s.
On-the-Job Search	Stressful Job Events	Stressful Life Events	.01	0.43	n.s.
On-the-Job Search	Stressful Life Events	Stressful Job Events	.28	16.05	.01

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